IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Jam	Docket No.:	10005248
Serial No.:	09/836,952	Art Unit:	2172
Filing Date:	04/17/2001	Examiner:	Ehichioya, Fred

Title : SYSTEM AND METHOD FOR PROVIDING CONTEXT-AWARE COMPUTER MANAGEMENT USING SMART IDENTIFICATION BADGES

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APPEAL BRIEF

This is an appeal from a decision of the Examiner dated December 4, 2003 (paper #5), finally rejecting Claims 1-26 of the above-referenced case.

I. REAL PARTY IN INTEREST.

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. RELATED APPEALS AND INTERFERENCES.

None.

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III. STATUS OF CLAIMS

Claims 1-26 are pending. Claims 1-26 stand rejected under 35 U.S.C. §103(a). A double-spaced clean copy of the Claims on appeal are reproduced below in Appendix A.

IV. STATUS OF AMENDMENTS

Appellant has not filed an amendment after final rejection. Claims 1-26 stand as they were prior to the Examiner's final rejection.

V. SUMMARY OF INVENTION

The present invention is a system and method for context-aware computer management. The method of the present invention includes the steps of: assigning database information a plurality of clearance levels; assigning each smart badge within a set of smart badges one of the clearance levels; using a wireless beacon to detect which smart badges are located within a predefined physical boundary; identifying a lowest clearance level assigned to the smart badges within the boundary; and providing access to that sub-set of the database information having a clearance levels no higher than the lowest identified clearance level on a computer located with the predefined physical boundary. (See Claim 1)

The system of the present invention includes: a database, including information differentiated by a plurality of clearance levels; a first wireless beacon; a set of smart badges, detected by the first beacon to be within a predefined physical boundary, each badge assigned one of the clearance levels; a computer located within the boundary; a system service module, coupled to the beacon, for identifying a lowest clearance level assigned to the smart badges within the boundary; and a software application, coupled to the service module and the database, for providing access to that sub-set of the information within the database having a clearance levels no higher than the lowest identified clearance level on the computer. (See Claim 21)

To paraphrase the above method and system description, the present invention relates to a system and method for automatically adjusting what information is presented on a computer based on detecting the clearance levels of various smart badge wearers who enter and leave from time to time a predetermined physical boundary, such as a workroom (see specification, p. 7, lns. 14-15). The information presented on the computer (see specification, p. 13, lns. 5-10) is restricted to the lowest clearance level of a smart badge wearer currently within the physical boundary and thus avoids disclosing higher clearance level information to those who are not permitted access to it(see specification, p. 8, lns. 10-20, and p. 10, lns. 3-10). The whole process is automatic using beacons (see specification, p. 7, lns. 23-24, and p. 8, lns. 1-8), so that smart badge wearers need not manually badge themselves in as they enter the room or manually badge themselves out as they leave the room. The system and method envisions that as few as one smart badge wearer up to any number of smart badge wearers will be within the physical boundary (e.g. visible) at any one time.

The system and method of the present invention are particularly advantageous over the prior art because a customizable software application provides access to information based on clearance levels of those smart badge wearers visible to the beacons. Also, the wide angle first

beacon enables the service module to monitor and communicate with all smart badges within a predefined area instead of just those smart badge wearers very close to or in front of the system. (See SUMMARY section of the patent application at page 5, lns. 7-12)

VI. ISSUES

ISSUE A: Whether Claims 1, 5, 7, 8, 10, 13, 16, 19, 21 and 26 are unpatentable over U.S. Patent 6,351,813 issued to David Mooney et al. (hereinafter "**Mooney**") in view of U.S. Patent 6,628,938 issued Sailesh Rachabathuni (hereinafter "**Rachabathuni**"), under 35 U.S.C. 103(a).

ISSUE B: Whether Claims 2, 3, 4, 6, 9, 11, 12, 14, 15, 17, 18, 20, 24 and 25 are unpatentable over **Mooney** in view **Rachabathuni** and further in view US Patent 5,629,981 issued to Virupax Mo Nerlikar (hereinafter "**Nerlikar**"), under 35 U.S.C. 103(a).

ISSUE C: Whether Claims 22 and 23 are unpatentable over **Mooney** in view of **Rachabathuni** and further in view of U.S. Patent 5,917,425 issued to James W. Crimmins et al (hereinafter "**Crimmins**"), under 35 U.S.C. 103(a).

VII. GROUPING OF CLAIMS

Applicant's Claim define 4 separate Claim Groups, with all Claims in a particular Group standing or falling together.

GROUP 1: Claims 1, 5, 7, 8, 9, 10, 13, 16, 18, 19, 20, 21, 22, 23 and 24, and 26. These Claims call for: detecting which smart badges are located within a predefined physical boundary; identifying a lowest clearance level assigned to the smart badges within the boundary; and providing access to that sub-set of the database information having a clearance level no higher than the lowest identified clearance level on a computer located with the predefined physical boundary.

GROUP 2: Claims 2, 3, 4, 6, 12, 14, 15, 17 and 25. These Claims further include: defining those smart badges within the boundary as a set of visible smart badges; updating the set of visible smart badges in response to a change in smart badge visibility status; and recalculating the lowest clearance level in response to the change in smart badge visibility status.

GROUP 3: Claim 11. This Claim further includes configuring the predetermined physical boundary by varying a sensitivity level of the wireless beacon.

VIII. ARGUMENT

GROUP 1:

A) Exemplary Claim:

Claim 1 exemplifies this Group. Applicant's Claim 1 recites a method for context-aware computer management comprising: [*Italic* added for emphasis]

assigning database information a plurality of clearance levels;

assigning each smart badge within a set of smart badges one of the clearance levels;

using a wireless beacon to detect *which smart badges are located within a* predefined *physical boundary*;

identifying a lowest clearance level assigned to the smart *badges within the boundary*; and

providing access to that sub-set of the database information having a clearance level *no higher than the lowest* identified clearance level on a computer located with the predefined physical boundary.

B) Legal Standards Of Review:

35 U.S.C. §103(a) states that "A claimed invention is unpatentable due to obviousness if the differences between it and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art."

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"In order to determine obviousness as a legal matter, four factual inquiries must be made concerning: 1) the scope and content of the prior art; 2) the level of ordinary skill in the art; 3) the differences between the claimed invention and the prior art; and 4) secondary considerations of nonobviousness, which in case law is often said to include commercial success, long-felt but unresolved need, failure of others, copying, and unexpected results. *Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966).*" *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 662-663 (Fed.Cir.2000).

"The necessity of Graham findings is *especially important* where the invention is *less technologically complex* ... . In such a case, the danger increases that the *very ease with which the invention can be understood* may prompt one to fall victim to the insidious effect of a *hindsight* syndrome wherein that which only the inventor taught is used against its teacher." *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 664 (Fed.Cir.2000) [*Italic* added for emphasis]

1) The Scope And Content Of The Prior Art

"The scope of the prior art includes art that is reasonably pertinent to the particular problem with which the invention was involved." *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 664 (Fed.Cir.2000) "In order to prevent a *hindsight*-based obviousness analysis, we have clearly established that the relevant inquiry for determining the scope and content of the prior art is whether there is a *reason, suggestion, or motivation* in the prior art or elsewhere that would have led one of ordinary skill in the art to combine the references. ... The Board *must identify specifically . . . the reasons* one of ordinary skill in the art would have been motivated to select

the references and to combine them to render the claimed invention obvious. ... Our case law makes clear that *the best defense against* the subtle but powerful attraction of a *hindsight*-based obviousness analysis *is rigorous application of the requirement for a showing* of the teaching or motivation to combine prior art references. ... The district court erred in failing to make *clear and particular findings* as to why the Gregory patents and the Fuller and Rupiper method are within the appropriate scope of the prior art in determining the obviousness[.]" *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 664-665 (Fed.Cir.2000) [*Italic* added for emphasis]

2) The Level Of Ordinary Skill In The Art

"[T]he *level of skill in the art* is a prism or lens through which a judge or jury views any *specific teaching or suggestions* within the prior art and itself *can not act as a bridge toward obviousness. ... Skill in the art* does *not act as a bridge* over gaps in substantive presentation of an obviousness case, but instead supplies the primary guarantee of objectivity in the process. ... The level of skill in the art *prevents an Examiner from using* their own insight or, worse yet, *hindsight, to gauge obviousness. Rarely*, however, *will the skill in the art* component operate to *supply missing knowledge* or prior art to reach an obviousness judgment." *Al-Site Corporation v. VSI International, Inc.* 174 F.3d 1308, at 1324 (Fed. Cir. 1999). [*Italic* added for emphasis]

"The determination of the level of ordinary skill in the art is an integral part of the Graham analysis. ... Factors that may be considered in determining the ordinary level of skill in the art include: 1) the types of problems encountered in the art; 2) the prior art solutions to those problems; 3) the rapidity with which innovations are made; 4) the sophistication of the technology; and 5) the educational level of active workers in the field. ... Not all such factors may be present in every case, and one or more of them may predominate." *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 666-667 (Fed.Cir.2000).

Also see, *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed.Cir.1983) ("To imbue one of ordinary skill in the art with knowledge of the invention in suit, when *no prior art* reference or references of record convey or *suggest that knowledge, is to fall victim to* the insidious effect of a *hindsight* syndrome wherein that which only the inventor taught is used against its teacher."). [*Italic* added for emphasis]

3) The Differences Between The Claimed Invention And The Prior Art

As the courts have often stated "virtually all [inventions] are combinations of old elements." *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 USPQ 865, 870 (Fed. Cir. 1983); see also *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1579-80, 219 USPQ 8, 12 (Fed. Cir. 1983) ("Most, if not all, inventions are combinations and mostly of old elements."). "[A]n examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention." *In re Rouffet* 149 F.3d 1350, 1357 (Fed.Cir.1998). Such an approach would be "an illogical and inappropriate process by which to determine patentability." *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996)." "It is insufficient to establish obviousness that the separate elements of the invention existed in the prior art, absent some teaching or suggestion, in the prior art, to combine the elements". *Ruiz v.*

A.B. Chance Co., 234 F.3d 654, 665 (Fed.Cir.2000) "[A] rejection cannot be predicated on the mere identification in [the prior art] of individual components of claimed limitations. Rather, *particular findings* must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." *In re Werner Kotzab*, 217 F.3d 1365, at 1371 (Fed.Cir.2000). [*Italic* added for emphasis]

"Whether the Board relies on an express or an implicit showing, *it must provide particular [factual] findings related thereto.* Broad *conclusory statements* standing alone *are not evidence.* [The courts have stated that] more than *a mere scintilla of evidence* is necessary [to support an Examiner's implicit conclusions]. [There must be] such relevant evidence as a reasonable mind might accept as adequate to support the [Examiner's] conclusion". *In re Werner Kotzab*, 217 F.3d 1365, at 1370-1371 (Fed.Cir.2000). [*Italic* added for emphasis]

The appropriate legal inquiry is *not* whether it would have been obvious to substitute an element, or modify the prior art, in a manner advanced by the Examiner, because *that is not the appropriate test of patentability. See, In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988).* [*Italic* added for emphasis] Rather, to meet its burden of showing *prima facie* obviousness, the PTO must necessarily *show some objective teaching* that would lead one of ordinary skill to combine the relevant teachings to solve the problem confronting the applicant. *In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988).*

4) Secondary Considerations Of Nonobviousness

This includes "commercial success, long-felt but unresolved need, failure of others, copying, and unexpected results." *Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966).*

Motivation to Combine

"To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court *requires the examiner to show* a motivation to combine the references that create the case of obviousness. In other words, the *examiner must show* reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, *would select* the elements from the cited prior art references for combination in the manner claimed." *In re Rouffet* 149 F.3d 1350, 1357 (Fed.Cir.1998). [*Italic* added for emphasis]

"Instead, the Board *merely invoked the high level of skill in the field of art.* If such a rote invocation could suffice to supply a motivation to combine, the more sophisticated scientific fields would rarely, if ever, experience a patentable technical advance. Instead, in complex scientific fields, the Board could routinely identify the prior art elements in an application, invoke the lofty level of skill, and rest its case for rejection. To counter this potential weakness in the obviousness construct, *the suggestion to combine* requirement *stands as a critical safeguard against hindsight* analysis and rote application of the legal test for obviousness. [T]he suggestion to combine requirement is a safeguard against the use of hindsight combinations to negate patentability. While the skill level is a component of the inquiry for a suggestion to combine, a lofty level of skill alone does not suffice to supply a motivation to combine. Otherwise a high level of ordinary skill in an art field would almost always preclude patentable inventions." *In re Rouffet* 149 F.3d 1350, 1357-1359 (Fed.Cir.1998). [*Italic* added for emphasis]

"As this court has often noted, invention itself is the process of combining prior art in a nonobvious manner. See, e.g., *Richdel, 714 F.2d at 1579; Environmental Designs, 713 F.2d at*

698. Therefore, even when the level of skill in the art is high, the Board *must identify specifically the principle,* known to one of ordinary skill, *that suggests the* claimed *combination.*" *In re Rouffet* 149 F.3d 1350, 1359 (Fed.Cir.1998). [*Italic* added for emphasis]

"Our court has provided a great deal of guidance on what kind of *factual findings* the district court may make in determining a reason, suggestion, or motivation to combine. The reason, suggestion, or motivation to combine may be found explicitly or implicitly: 1) in the prior art references themselves; 2) in the knowledge of those of ordinary skill in the art that certain references, or disclosures in those references, are of special interest or importance in the field; or 3) from the nature of the problem to be solved, leading inventors to look to references relating to possible solutions to that problem. ... While the references need not expressly teach that the disclosure contained therein should be combined with another, *the showing of combinability must be "clear and particular."* (internal citations omitted) *Ruiz v. A.B. Chance Co.,* 234 F.3d 654, 664-665 (Fed.Cir.2000) [*Italic* added for emphasis]

Otherwise stated, there are only "three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet* 149 F.3d 1350, 1357 (Fed.Cir.1998). The "Nature Of The Problem To Be Solved" prong under a Motivation to Combine analysis is equivalent to "The Scope And Content Of The Prior Art" prong under *Graham*, presented above. The Teachings Of The Prior Art prong under the Motivation to Combine analysis is equivalent to "The Differences Between The Claimed Invention And The Prior Art" prong under *Graham*, presented above. The "Knowledge Of Persons Of Ordinary Skill In The Art" prong under the Motivation to Combine analysis is equivalent to "The Level Of Ordinary Skill In The Art" prong under *Graham*, presented above.

MPEP

In Appendix B, Applicant cites and quotes various sections of the MPEP which are relevant to the Legal Standards of Review. These cites are for reference purposes only and in no way detract from the Primary Authorities discussed within the body of this Appeal Brief.

C) Examiner's Errors With Respect To Application Of The Legal Standards Of Review To The Applicant's Invention

An improper Legal Standard of Review was applied by the Examiner when reviewing Claim 1. The Examiner's errors with respect to application of the Legal Standards Of Review to the Applicant's invention are now discussed element by element.

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1) The Scope And Content Of The Prior Art

As stated in the preamble of Claim 1, the present invention is directed to the problem of "context-aware computer management". More specifically, Claim 1 recites "providing access to ... information ... on a computer" "having a clearance level *no higher than the lowest* identified

clearance level" assigned to each smart badge within "a set of smart badges" detected "using a wireless beacon" as "*located within a* predefined *physical boundary.*"

In response to Claim 1, the Examiner identified the **Mooney** and **Rachabathuni** patents. First, **Mooney** does not teach or suggest "using a wireless beacon" to perform "access control" (**Mooney** col. 1, lns. 59-62), as the Examiner has admitted in the Final Office action (i.e. "**Mooney** does not explicitly teach using a wireless beacon to detect which smart badges are located with a predefined physical boundary"), which is why the Examiner then cited **Rachabathuni**.

Rachabathuni however is not directed in any way toward the problem of how to limit a set of information presented to a user based on a "clearance level" within a "secure" environment. Instead **Rachabathuni** is directed toward "providing" any and all possible information to a set of users holding hand-held devices and roaming around a public "shopping mall or museum" (**Rachabathuni** col. 3, lns. 24-31). **Rachabathuni** is also directed toward the art of informing users of each other's proximity (i.e. "Another particularly useful application is determining proximity of a user or users to wireless stations. Herewith users can be made aware of the location, and users can be made aware of each others locations. Such a mechanism is particularly useful for roaming users who want to contact or meet each other. A user may advantageously also set a user profile to filter whether an alert should be provided in a given context. Also advantageously system behavior may be modified depending on proximity information. Users within range of the same beacon could have their user profiles checked so that users of similar interest could easily contact each other, for instance. Or users could check profiles provided by beacons." (**Rachabathuni** col. 3, lns. 32-44) **Rachabathuni** then teaches providing a set of application services to each of the disparate users walking around in a public, non-secure environment (i.e. "In the wireless system 20, the wireless beacons 22 and 23 are networked to form a local area network to provide a tailored set of applications covering a given geographical area, the premises of a museum for instance." (**Rachabathuni** col. 5, lns. 9-13) **Rachabathuni** also teaches: "The wireless system 90 may be configured to use historical location data to predict movements of roaming users, to inform a user of it's proximity to a system resource, to make aware users of each other's proximity or to respective proximities to respective locations, or to other applications described or suggested by the present application. Services may be provided that use relative location information, describing the proximity of users and wireless devices to a known location or other users and wireless devices." (**Rachabathuni** col. 6, lns. 66-67, and col. 7, lns. 1-8); and "As an example, a user carrying a wireless device proceeds along a street into the range of wireless beacons. On the basis of gathered location information, the wireless system 90 may predict when the user arrives as a given location at a certain time. Such a prediction mechanism may be implemented as an application running at the server 91. The wireless system 90 may use long term history of proximity of location for users to build profiles of their movements, individual or shared interests. Herewith, users can be linked with places, shops, and other users." (**Rachabathuni** col. 7, lns. 32-41) Thus the problem **Rachabathuni** is addressing is essentially how to provide a person holding their own handheld computer, information on their surroundings (e.g. museum, shopping mall, and other users). In sharp contrast, the Claim 1 invention is directed toward the problem of providing information assigned a clearance level (e.g. medical record data, private files, and classified information) to a user on a computer ONLY IF other users within a

predetermined physical boundary have a clearance level which is greater than or equal to the information to be displayed. Thus the Applicant asserts that **Rachabathuni** is not art which one of ordinary skill would have been motivated to select and to combine with **Mooney**.

The Examiner in the Final Office Action asserts, "It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify teaching of **Rachabathuni** with the teaching of **Mooney** wherein the wireless beacon is configured to communicate with the smart badge through the location server. The location server authenticates the smart badge to give access within the specified security level. This access control system includes communication means for providing proper communications with a number of smart card readers and smart cards. The motivation being that the system restricts access to, and ensures trusted security of confidential, proprietary, classified, or other sensitive information contained in files in the computer system."

Applicant states however, that the Examiner's statements are mere conclusory assertions of a "motivation to combine" which relies upon the Applicant's own Claim 1 using hindsight in an attempt to stitch together **Mooney** and **Rachabathuni** in a way which was neither taught nor suggested by either **Mooney** or **Rachabathuni**. The Examiner's assertions fall well short of the Federal Circuit's requirement that the Examiner "*must identify specifically . . . the reasons* one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious." *Ruiz v. A.B. Chance Co.,* 234 F.3d 654, 664-665 (Fed.Cir.2000) [*Italic* added for emphasis] *Ruiz* further goes on to state, "Our case law makes clear that *the best defense against* the subtle but powerful attraction of a *hindsight*-based obviousness analysis *is rigorous application of the requirement for a showing* of the teaching or motivation to combine prior art references." *Ruiz v. A.B. Chance Co.,* 234 F.3d 654, 664-665 (Fed.Cir.2000) [*Italic* added for emphasis] The Examiner has not presented even a scintilla of evidence to "*identify specifically . . . the reasons* one of ordinary skill in the art would have been motivated to select the references and to combine them" nor has the Examiner providing any evidence "showing" such alleged motivation to combine.

In fact, the Applicant can discern no other reason for the Examiner's citation to **Rachabathuni** except that the Applicant's Claim 1 recites the term "beacon". The Examiner's approach of responding to Applicant's claims by looking for and selecting individual references, including **Rachabathuni** that mentions the term "beacon" (out of context), and without any statement in the art suggesting its combination with **Mooney**, and then concluding *without further evidence* that combination of their elements would be "obvious" simply does not comport with the legally appropriate criteria for measuring obviousness at the time of invention. **Rachabathuni** apparently was relied upon in hindsight by the Examiner simply because the Examiner believes that mere mention of the word "beacon" in **Rachabathuni** would be useful in rejecting the present claims. Such out of context keyword searching as applied to the claimed invention is a legally improper way to simplify the difficult determination of obviousness.

Since Claims 22 and 23 are included in the GROUP 1 Claims, and the Examiner rejected said claims in view of **Crimmins**, the Applicant points out here that, like **Rachabathuni**, **Crimmins** is not directed in any way toward the problem of how to limit a set of information presented to a user on a computer screen based on a "clearance level" within a "secure" environment. Instead **Crimmins** is merely a position/location monitor (column 2 lines 15-16, and 24-26; and column 6 lines 15-18). **Crimmins** uses beacons to detect a person's location but

does not update a computer display co-located with said person with information having varying clearance levels.

The Examiner in the Final Office Action asserts, "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of **Crimmins** with teaching of **Mooney** and **Rachabathuni** wherein wide angle RF beacon is more effective in detecting small infrared signal of portable device. The motivation is that the wide RF beacon is more sensitive to a position change." Again the Examiner's assertions are completely unsupported by any of the cited prior art references. The Examiner has nowhere cited in any reference support for his assertion that one of ordinary skill would look toward a persons "location" in order to vary a clearance level of information displayed on a computer. Like with respect to **Rachabathuni**, the Applicant can discern no other reason for the Examiner's citation to **Crimmins** except that the Applicant's Claim 22 and 23 recite the term "beacon". Such an approach simply does not comport with the legally appropriate criteria for measuring obviousness at the time of invention. The Examiner cites as support **Crimmins** at col. 6, lns. 10 - 11 and lns. 40 – 48, however at lns. 10-11 **Crimmins** refers not to "a wide angle RF beacon" as stated in Claim 22, but refers to a "beacon signal that is larger." Such reference refers to a beacon's signal strength and not whether the beacon is a wide or narrow angle beacon. Signal strength and beacon type are simply two completely different concepts. Similarly, Examiner's reference to lns. 40-48 is similarly puzzling in that those lines state, "This then enters an RF transmission control routine 100 to analyze the received location code 76 and, when a change in location is sensed, it produces an output signal for RF transmission via transmitter 102 and RF antenna 104 to the central processor 56, see FIG. 1. The RF transmission includes at least the new beacon location code and the PIN signal identifying the particular IR portable device which sensed a change in location." This portion of **Crimmins** refers not to whether the beacon is a "wide angle" beacon, but instead talks about what information is carried by the beacon signal.

With respect to Claim 23, which recites a second diffuse beacon, the Examiner cites **Crimmins** at col. 6, lns. 15 – 16, which states, "a small IR signal amplitude difference, such as caused by the movement away from one beacon 72.1 and closer to another such as 72.2, can be detected as a change in location of the IR portable device." The relevance of variations in a beacon's amplitude does not teach that the beacon should be either wide angle or diffuse. Like Examiner's choice of **Rachabathuni**, the Examiner appears to have selected **Crimmins** using hindsight in view of the Applicant's Claims, simply because the Examiner believes that mere mention of the word "beacon" in **Crimmins** would be useful in rejecting the present claims.

2) The Level Of Ordinary Skill In The Art and The Differences Between The Claimed Invention And The Prior Art)

As stated in Claim 1, the present invention is directed toward "providing access to ... information ... on a computer" "having a clearance level *no higher than the lowest* identified clearance level" assigned to each smart badge within "a set of smart badges" detected "using a wireless beacon" as "*located within a* predefined *physical boundary.*"

In the Final Office Action, the Examiner asserts that "Regarding Claims 1 and 13, **Mooney** teaches ... identifying a lowest clearance level assigned to the smart badges with the boundary (see column 16, lines 19 - 30)". Applicant points out that the Examiner *contradicts*

this assertion in the First Office Action mailed on June 6, 2003, wherein the Examiner states in paragraph 4 that, "**Mooney** does *not* explicitly *teach* smart badge and *lowest clearance level*." [*italic* added for emphasis] Examiner's inconsistency with respect to this crucial claim language is evidence which suggests that the Examiner is not applying a consistent or proper unobviousness analysis to the present invention's claims.

The most relevant portion of Examiners citation to **Mooney** however, is at Col. 16, lns. 28-30 which states, "This hierarchy is a multiple-tier access control/crypto system comprising a series of security compartments. Security compartment 1, or level 1, is the least secure". Such a quote from **Mooney** however doesn't even begin to teach or suggest the Claim 1's "identifying a lowest clearance level assigned to the smart *badges within the boundary*;" Merely having a "series of security compartments" one of which is "least secure" doesn't teach or suggest anything with respect to *what to do with* such compartments or security levels as taught by the present invention. Examiner's citation to this portion of **Mooney** does nothing to support Examiner's speculative argument that **Mooney** teaches "identifying a lowest clearance level assigned to the smart *badges within the boundary*".

The Examiner then asserts that **Mooney** teaches ... "providing access (see column 1, lines 65 - 67) to that sub-set of the database information having a clearance levels no higher than the lowest identified clearance level on a computer located with the predefined physical boundary (see Fig. 1 and column 8, lines 21 - 55)." **Mooney** at Col. 8, lines 21 – 55 is a broad swath of text referring to how a single smart card assigned to a single user can contain multiple "electronic keys" and that such keys can be associated with "multiple levels of security". Such portion of **Mooney** does not teach or suggest Claim 1's contemporaneous evaluation of multiple smart cards for multiple users in order to identify a lowest user clearance level.

Applicant emphasizes that **Mooney** evaluates clearance levels *one user at a time* as that one user manually enters their smart card into a smart card reader (see column 1 lines 59 – 62) which states, "requesting information from a user to determine if the user is authorized to access the computer." Also **Mooney** at (Column 16, lines 19 - 30) discusses only evaluating the security clearance of *a single user* who has inserted their smart card into a reader as shown in **Mooney** Fig. 1.

The Applicant's Claim 1 states "identifying *a lowest* clearance level assigned to the *smart badges* [*plural*] within the boundary" which means that all of the smart badges within the boundary are having their clearance level evaluated before "providing access to that sub-set of the database information having a clearance level no higher than the lowest identified clearance level on a computer located with the predefined physical boundary."

In contrast, the only physical boundary in **Mooney** is a space for inserting a single smart card into **Mooney's** single "smart card reader", as shown in Fig. 1. **Mooney's** smart card reader can only accept *one smart card at a time* and **Mooney** evaluates the security clearance of *only one user at a time.* There is no teaching or suggestion in **Mooney** that multiple smart cards be inserted into **Mooney's** smart card reader at the same time so that the Applicant's Claimed simultaneous evaluation of the clearance levels of all users associated with smart badges within a predefined physical boundary could occur.

Mooney's "one user at a time" approach actually teaches away from the present invention in that **Mooney's** system *permits a first user having a higher clearance level to badge in and have a computer display higher clearance level information, even as another person having a lower clearance level enters the area and is able to see the higher clearance level information on*

the computer display screen. The claimed invention does not permit such a security lapse.

Similarly, **Mooney** at (Column 8, lines 21-55) and in Fig. 1, does not teach or suggest such simultaneous evaluation of smart badge clearance levels of all users within a predefined physical boundary.

Mooney also does not teach or suggest the claimed using a wireless beacon to detect which smart badges are located within a predefined physical boundary and thereby restricting information access within said boundary.

The Examiner then goes on to assert that, "**Mooney** does not explicitly teach using a wireless beacon to detect which smart badges are located with a predefined physical boundary. However, **Rachabathuni** teaches using a wireless beacon to detect which smart badges (see column 6, lines 53 - 67 and column 7, lines 1 - 43) are located with a predefined physical boundary (see column 3, lines 26 - 35 and column 5, lines 9 - 16)"; and that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify teaching of **Rachabathuni** with the teaching of **Mooney** wherein the wireless beacon is configured to communicate with the smart badge through the location server. The location server authenticates the smart badge to give access within the specified security level. This access control system includes communication means for providing proper communications with a number of smart card readers and smart cards. The motivation being that the system restricts access to, and ensures trusted security of confidential, proprietary, classified, or other sensitive information contained in files in the computer system."

First, as the Applicant has pointed out above, **Rachabathuni** does not anywhere teach or suggest using such identification of users within a given proximity to a beacon for "providing access to that sub-set of the database information having a clearance level no higher than the lowest identified clearance level" as recited in Claim 1.

The Examiner's merely conclusory statements beginning with "It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify teaching of **Rachabathuni** with the teaching of **Mooney**" when there is absolutely no teaching or suggestion in either **Mooney**, **Rachabathuni**, **Nerlikar**, or **Crimmins** to do so was a legally improper way to simplify the difficult determination of obviousness.

The Federal Circuit has stated that: "*Skill in the art* does *not act as a bridge* over gaps in substantive presentation of an obviousness case, but instead supplies the primary guarantee of objectivity in the process. ... The level of skill in the art *prevents an Examiner from using* their own insight or, worse yet, *hindsight, to gauge obviousness*." *Al-Site Corporation v. VSI International, Inc.* 174 F.3d 1308, at 1324 (Fed. Cir. 1999). Also see, *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed.Cir.1983) ("To imbue one of ordinary skill in the art with knowledge of the invention in suit, when *no prior art* reference or references of record convey or *suggest that knowledge, is to fall victim to* the insidious effect of a *hindsight* syndrome wherein that which only the inventor taught is used against its teacher."). "Whether the [Examiner] relies on an express or an implicit showing, *it must provide particular [factual] findings related thereto.* Broad *conclusory statements* standing alone *are not evidence.* [The courts have stated that] more than *a mere scintilla of evidence* is necessary [to support an Examiner's implicit conclusions]. [There must be] such relevant evidence as a reasonable mind might accept as adequate to support the [Examiner's] conclusion". *In re Werner Kotzab*, 217 F.3d 1365, at 1370-1371 (Fed.Cir.2000). The appropriate legal inquiry is *not* whether it would

have been obvious to substitute an element, or modify the prior art, in a manner advanced by the Examiner, because *that is not the appropriate test of patentability. See, In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988).* [*Italic* added for emphasis] Rather, to meet its burden of showing *prima facie* obviousness, the PTO must necessarily *show some objective teaching* that would lead one of ordinary skill to combine the relevant teachings to solve the problem confronting the applicant. *In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988).*

The Examiner did *not*, however, provide even a scintilla of evidence *showing* what specific understanding or technological principle within the knowledge of one of ordinary skill in the art would have suggested someone attempting to provide a secure information system would simultaneously look to both **Mooney**, and **Rachabathuni** (a public non-secure system) in order to generate the invention of Claim 1.

Because the Examiner did not *show* any specific understanding or principle within either **Mooney**, **Rachabathuni**, **Nerlikar**, or **Crimmins**, or anywhere else in the art, that would motivate one with no knowledge of the Applicant's invention to make the combination, the Applicant asserts that the Examiner selected these references with the assistance of hindsight. The courts forbid the use of hindsight in the selection of references that comprise the case of obviousness. Lacking a motivation to combine references, the Examiner did not show a proper *prima facie case* of obviousness. The Applicant thus respectfully requests that the Board reverse the rejection the Claims in GROUP 1 over **Mooney**, **Rachabathuni**, **Nerlikar**, or **Crimmins** both individually and in combination. The rejection of Applicant's Group 1 Claims over these references was improper and Applicant respectfully requests that the rejection be reversed and all Group 1 Claims be allowed.

That the Examiner is applying an improperly limited unobviousness test is further evidenced in Advisory Action, wherein the Examiner asserts that:

> "Test for combining references is not what individual references themselves suggest but rather what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971)."

The Examiner is using this quote as his justification for *not* providing any *showing* (i.e. teaching or suggestion) within the prior art in support of the Examiner's conclusions. In other words, the Examiner is focused on the words "Test ... is not what individual references themselves suggest" and is misinterpreting this as doing away with a proper *Graham* unobviousness analysis.

The Examiner may have quoted, In re McLaughlin, because it is found in ***MPEP §2145 "Impermissible Hindsight" part X, sub-part A***. This section of the *MPEP*, by itself, however does not do justice to the complexity of a hindsight analysis as already presented by the Applicant above and perhaps misled the Examiner in to thinking that "[a]ny judgement [sic] on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning" as justification for the hindsight analysis presented in the Final Office Action. Such a reading of *In re McLaughlin* in view of the Federal Circuit cases presented and discussed within this Appeal Brief however is improper.

In fact, the Examiner's Advisory Action should have also considered ***MPEP §2145, part X, sub-part C***, on the same page of the *MPEP*, which states: "As discussed in MPEP § 2143.01,

there must be some suggestion or motivation, either in the references themselves or in the knowledge generally avail-able to one of ordinary skill in the art, to modify or combine reference teachings. The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references, as discussed in the aforementioned section." Consultation to this paragraph may have tempered the Examiner's enthusiasm for the earlier sub-part A.

Thus Applicant repeats that nowhere in **Mooney**, **Rachabathuni**, **Nerlikar**, or **Crimmins** individually or in view of each other, is Claim 1's "identifying a lowest clearance level assigned to the smart *badges within the boundary*; and providing access to that sub-set of the database information having a clearance level *no higher than the lowest* identified clearance level on a computer located with the predefined physical boundary" taught or suggested, and Applicants respectfully request that all GROUP 1 claims and dependent claims thereof be allowed.

Other erroneous statements in the Advisor Action include, "The applicant agrees with examiner that "**Mooney** teaches ... identifying a lowest clearence[sic] level .... on a computer located with the predefined physical boundary" as stated on Page 3, paragraph 2 of the applicant's arguments. Examiner thanks applicant for acknowledging that the interpretation of the claim language presented in the last Office Action is somewhat correct. Examiner believes that entire interpretation is appropriate."

In fact the Examiner has misquoted Applicant's response to the Final Office Action. In said response, the Applicant stated, "In contrast, the only physical boundary discussed in **Mooney** is a space for inserting a single smart card into **Mooney's** single "smart card reader", as shown in Fig. 1. **Mooney's** smart card reader can only accept one smart card at a time and **Mooney** evaluates the security clearance of only one user at a time. There is no teaching or suggestion in **Mooney** that multiple smart cards be inserted into **Mooney's** smart card reader at the same time so that the Applicant's claimed simultaneous evaluation of the clearance levels of all users associated with smart badges within a predefined physical boundary could occur." The Examiner's misquote ignores Claim 1's reference to multiple users (i.e. "a set of smart badges" and "identifying a lowest clearance level assigned to the smart *badges*") in the context of determining a lowest clearance level of the set of smart badges located "within the boundary". Mooney simply does not contemporaneously evaluate a set of smart cards to determine which card has a lowest clearance level and then display only such information which does not exceed said lowest clearance level.

Furthermore, the Examiner's statement that "*Examiner believes* that entire interpretation is appropriate" is applies a legally improper unobviousness test to the present invention. An Examiner's "belief" does not relive the Examiner from providing a showing in the art to back up said "belief." (e.g. "The level of skill in the art *prevents an Examiner from using* their own insight or, worse yet, *hindsight, to gauge obviousness*." *Al-Site Corporation v. VSI International, Inc.* 174 F.3d 1308, at 1324 (Fed. Cir. 1999). [*Italic* added for emphasis]). The appropriate legal inquiry is *not* whether it would have been obvious to substitute an element, or modify the prior art, in a manner advanced by the Examiner, because *that is not the appropriate test of patentability. See, In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988).* [*Italic* added for emphasis]

Rather, to meet its burden of showing *prima facie* obviousness, the PTO must necessarily *show some objective teaching* that would lead one of ordinary skill to combine the relevant teachings

to solve the problem confronting the applicant. *In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988).* The law clearly states that the *Examiner's belief* is not the proper test of patentability and thus does not support Examiner's conclusions.

In the Advisor Action the Examiner further states that, "**Mooney** supports clearrance[sic] levels for multiple users at time as disclosed on column 6, lines 61 - 67. **Rachabathuni** also supports the identifiaction[sic] and registeration[sic] of multiple user at a time. **Rachabathuni** supports this as disclosed in Figs. 9 and 13; column 6, lines 45 - 67 and column 8, lines 7 - 67; these figures, columns and lines shows proximity alert and location identification to register locations and identities of multiple users through wireless beacon at the same time."

In fact, **Mooney** at Col. 6, lines 61 – 67 states, "The access code protection scheme is a built-in feature of smart cards. The smart card operating system requires submission of the correct access code before granting access to the information contained within the smart card. The present invention supports several types of smart cards, each with its own formatting requirements and access code methodology." This quote from **Mooney** nowhere teaches or suggests anything about "multiple users at a time." Instead this portion of **Mooney** discusses "submission of the correct access code before granting access to the information" which is a very general statement applicable to security systems in general.

Also the Examiners reference to any identification and registration of multiple user at a time, allegedly within **Rachabathuni**, in not way teaches or suggest the Claim 1's "identifying a lowest clearance level assigned to the smart *badges within the boundary*; and providing access to that sub-set of the database information having a clearance level *no higher than the lowest* identified clearance level on a computer located with the predefined physical boundary."

In fact, **Rachabathuni** in Fig. 9 shows "a wireless system with a location identification server" and in Fig. 13 shows "a proximity alert application". The Examiner shows nothing about what these Figures have to do with Claim 1's "identifying a lowest clearance level assigned to the smart *badges within the boundary*; and providing access to that sub-set of the database information having a clearance level *no higher than the lowest* identified clearance level on a computer located with the predefined physical boundary."

Similarly, the Examiners identification in **Rachabathuni** of Col. 6, lines 45 – 67 which actually refers to both Figures 9 and 10, and Examiners identification in **Rachabathuni** of Col. 8, lines 7 – 67, which actually refers to Figures 13, and 14, in no way teaches or suggest Claim 1's limitations. Instead the Examiner seems to be simply recited broad swaths of **Rachabathuni** in a vague and unfocused attempt to imply that something in **Rachabathuni** is pertinent to the present invention without actually pointing out what that something is. Also the Examiners reference to "registration" is puzzling and provides no basis for rejecting Applicant's Claim 1 or any of the GROUP 1 claims.

3) Secondary Considerations Of Nonobviousness

With respect to this fourth prong of *Graham* which looks at "commercial success, long-felt but unresolved need, failure of others, copying, and unexpected results", these issues were not explicitly discussed during prosecution of this case and so are not discussed here, however, the Applicant reserves the right to present evidence on such issues at a later time, as necessary.

For the reasons discussed, Applicant asserts that the rejection of Claim 1 is in error and Applicant respectfully requests that said rejection be reversed as to Claim 1, along with all GROUP 1 Claims (i.e. Claims 1, 5, 7, 8, 9, 10, 13, 16, 18, 19, 20, 21, 22, 23 and 24, and 26). Applicant respectfully requests that all GROUP 1 claims be allowed as well as all Claims depending thereon.

4) Other References Cited in the First Office Action

For the purpose of being thorough, Applicant in this section reasserts arguments with respect to **Nerlikar** and **Crimmins** which the Applicant provided to the Examiner in Applicant's response to the First Office Action, but which the Examiner stated were "moot in view of the new ground(s) of rejection" within the Final Office Action.

Nerlikar does not, in view of **Mooney**, **Rachabathuni**, or **Crimmins** teach or suggest the Claim 1's "using a wireless beacon to detect which smart badges are located within a predefined physical boundary" and "providing access to that sub-set of the database information having a clearance level no higher than the lowest identified clearance level on a computer located with the predefined physical boundary."

Instead of simultaneously detecting multiple smart badge wearers and adjusting what information is displayed on a computer screen where said smart badge wearers are located as is stated in Claim 1, **Nerlikar** (column 4 lines 21 – 24) merely is set to detect and authorize *only one user at a time* to access an information network. Also, in **Nerlikar** even if a higher clearance level person had "handshaked" with the RFID device, the computer would still display the higher clearance level information even though another person having a lower clearance level may have entered the area, resulting in a possible security breach. Also the dynamic change in **Nerlikar** (column 13 lines 55-67) is one that still must be manually changed for a "specific period of time" and automatically cancels such access once that time period has expired. In contrast, Claim 1 includes a beacon which detects smart badges in real-time and does not require manual time period configuration.

Claim 1 is also distinguishable from **Crimmins**. **Crimmins** does not teach or suggest, either by itself or in view of **Mooney**, **Rachabathuni**, or **Nerlikar**, the claimed "providing access to that sub-set of the database information having a clearance level no higher than the lowest identified clearance level on a computer located with the predefined physical boundary." Instead **Crimmins** is merely a position/location monitor (column 2 lines 15-16, and 24-26; and column 6 lines 15-18). **Crimmins** uses beacons to detect a person's location but does not update a computer display co-located with said person with information having varying clearance levels.

For all these reasons discussed, Applicant reasserts that the rejection of Claim 1 is in error and Applicant respectfully requests that said rejection be reversed as to Claim 1, along with all GROUP 1 Claims (i.e. Claims 1, 5, 7, 8, 9, 10, 13, 16, 18, 19, 20, 21, 22, 23 and 24, and 26). Applicant respectfully requests that all GROUP 1 claims be allowed as well as all Claims depending thereon.

GROUP 2:

A) Exemplary Claim:

Claim 3 exemplifies this Group and adds limitations beyond those of Group 1, namely: *defining those* smart badges *within the boundary* as *a set of visible smart badges*; updating the set of visible smart badges in response to a change in smart badge visibility status; and *recalculating the lowest clearance level* in response to the *change in smart badge visibility* status. [*Italic* added for emphasis]

B) Legal Standards Of Review:

The *Legal Standard Of Review* for a "§103(a) unobviousness" rejection and the *Legal Standard Of Review* for finding a "Motivation to Combine" more than one prior art reference in support of a §103(a) unobviousness rejection is has been presented with respect to the GROUP 1 Claims and both standards apply to the GROUP 2 Claims as well.

C) Examiner's Errors With Respect To Application Of The Legal Standards Of Review To The Applicant's Invention

An improper Legal Standard of Review was again applied by the Examiner when reviewing Claim 3. The Examiner's errors with respect to application of the Legal Standards Of Review to Claim 3 include those made in connection with Group 1, but also include the following.

Graham v. John Deere Co.

The Level Of Ordinary Skill In The Art and The Differences Between The Claimed Invention And The Prior Art)

Examiner in the Final Office Action rejects Claim 3 under 35 U.S.C. 103(a) over **Mooney** in view of **Rachabathuni** and **Nerlikar**. The Examiner asserts that while "**Mooney** or **Rachabathuni** does not explicitly teach defining those smart badges within the boundary as a set of visible smart badges; and updating the set of visible smart badges in response to a change in smart badge visibility status" that "**Nerlikar** teaches defining those smart badges within the boundary as a set of visible smart badges (see column 8, lines 23 - 35); and updating the set of visible smart badges in response to a change in smart badge visibility status (see column 13, lines 55 - 64)." The Examiner also asserts that "Regarding to claims 3 ... , **Nerlikar** teaches recalculating the lowest clearance level in response to the change in smart badge visibility status (see column 9, lines 50 - 56 and column 10, lines 43 - 48)."

Nerlikar at Col. 8, lines 23 – 35 states, "The unique portion of the present packetization scheme is that the location stamp showing the authorized origination and destination(s) of the request is encoded and encrypted. This aspect is critical in the sense of preventing unauthorized entry in a control area. If a person attempts unauthorized entry by using a location code obtained by copying airborne transmissions or stolen badge, etc., access is denied first because the person is unauthorized and second because an authorized user also has a limited number of locations in which transactions are authorized. Information relating to the limited number of authorized locations is stored in a look up table of the host computer or the network server and can be

dynamically updated as required for additional security." This quote however is directed toward "authorized origination and destination(s)" and "preventing unauthorized entry in a control area" and in no way teaches or suggests Claim 3's "*defining those* smart badges *within the boundary* as *a set of visible smart badges*". In **Nerlikar** users are excluded from a "control area" if their said control area is not one of the user's "authorized origination and destination(s)". In sharp contrast, the Applicant's Claim 3 does not "exclude" anyone from the "predefined physical boundary". Instead, according to Claim 3, users are free to enter and exit the "predefined physical boundary" as they please, and the method responds by updating the smart badge's "visibility status". The Examiner thus mistakenly equates a logical change is status with being physically excluded from a control area.

Nerlikar at Col. 13, lines 55 – 64 states, "Another aspect of the present invention is that authorization codes, statuses and user-sets for access for certain locations may be dynamically changed. Specifically, when a person is working on a secure project for an extended period or specific period of time, wherein the person will have to travel from his or her home building A to buildings B and C or other remote authorized locations for an extended period of time or fixed period of time, the authorization for the person's entry into buildings B and C can be changed dynamically to allow access to both the buildings as well as any equipment therein." This quote however is directed toward changing a user's "authorization for ... entry into buildings" and in no way teaches or suggests Claim 3's "updating the set of visible smart badges in response to a change in smart badge visibility status". Again in **Nerlikar** users are excluded from a "building" if said user does not have the right "authorization codes, statuses and user-sets". Such physical exclusion is in sharp contrast to Claim 3's free unfettered access to "predefined boundary" wherein only the user's "visibility status" is "updated." The Examiner is again mistakenly attempting to equate Claim 3's logical change is status with **Nerlikar's** physically exclusion from a building.

Nerlikar at Col. 9, lines 50 - 56 states, "In the event the user identification code carried by the RFID badge is copied in order to gain unauthorized access to information from a location different from that originally authorized (e.g. a computer hacker, misuser/abuser attempting access to secure information or documents via modem), this access would be denied." This quote however is directed toward denying access to a computer network from an unauthorized location and in no way teaches or suggests Claim 3's "*recalculating the lowest clearance level* in response to the *change in smart badge visibility* status." In fact **Nerlikar** doesn't teach or suggest Claim 3's recalculation of a clearance level at all. Instead **Nerlikar** simply prevents the unauthorized hacker from logging on to a network. The Examiner is mistakenly attempting to equate **Nerlikar's** access denial with Claim 3's lowest clearance level recalculation.

Nerlikar at Col. 10, lines 43 – 48 states, "If an individual's badge is stolen, the individual simply calls the network management people regarding the stolen badge. The network management people drop the badge from the authorized user list. Therefore, the present invention can provide real-time configuration control and security control." This quote however is directed toward how a user can make a telephone call to a security administrator who can then manually inactivate the user's badge. This in no way teaches or suggests Claim 3's automatic "*recalculating the lowest clearance level* in response to the *change in smart badge visibility* status." The Examiner is mistakenly attempting to equate **Nerlikar's** telephone call with Claim 3's "*change in smart badge visibility* status" whereby a smart badge wearer merely walks in or

out of a predefined physical boundary. Applicant unequivocally emphasizes that the two are not at all even remotely similar.

The Examiner then concludes that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of **Nerlikar** with the teaching of **Mooney** and **Rachabathuni** wherein user set for access for certain locations may be dynamically changed. The motivation being that this update allows the user to access new location without hindrance and access denied for unauthorized locations." This Examiner based, speculative reasoning is not only a legally improper way to simplify the difficult determination of obviousness, as discussed above, with reference to the GROUP 1 claims, since the Examiner has provided no showing in the prior art of such a combination, but is also off-point. Any "motivation [which] allows the user to access new location without hindrance and access denied for unauthorized locations" if present focuses on a denial or authorization of a user with respect to a physical "location". In contrast Claim 3 is directed toward "providing access to ... information ... on a computer" and does not in anyway deny or authorize a user's access to a physical location. Thus Examiner's reasoning, even if true, is not relevant to a proper unobviousness analysis of Claim 3, any of the GROUP 2 claims, or any of the other present invention's pending Claims.

For at least the reasons discussed, Applicant asserts that the rejection of Claim 3 is in error and Applicant respectfully requests that said rejection be reversed as to Claim 3, along with all GROUP 2 Claims (i.e. Claims 2, 3, 4, 6, 12, 14, 15, 17 and 25). Applicant respectfully requests that all GROUP 2 claims be allowed as well as all Claims depending thereon.

GROUP 3:

A) Exemplary Claim:

Claim 11 exemplifies this Group and adds limitations beyond those of Group 1, namely: configuring the predetermined physical boundary by *varying a sensitivity level of the* wireless *beacon*. [*Italic* added for emphasis]

B) Legal Standards Of Review:

The *Legal Standard Of Review* for a "§103(a) unobviousness" rejection and the *Legal Standard Of Review* for finding a "Motivation to Combine" more than one prior art reference in support of a §103(a) unobviousness rejection is has been presented with respect to the GROUP 1 Claims and both standards apply to the GROUP 3 Claims as well.

C) Examiner's Errors With Respect To Application Of The Legal Standards Of Review To The Applicant's Invention

An improper Legal Standard of Review was again applied by the Examiner when reviewing Claim 11. The Examiner's errors with respect to application of the Legal Standards Of Review to Claim 11 include those made in connection with Groups 1 and 2, but also include the following.

Graham v. John Deere Co.

The Level Of Ordinary Skill In The Art and The Differences Between The Claimed Invention And The Prior Art)

Examiner in the Final Office Action rejects Claim 11 under 35 U.S.C. 103(a) over **Mooney** in view of **Rachabathuni** and **Nerlikar**. The Examiner asserts that while "**Mooney** or **Rachabathuni** does not explicitly teach configuring a predetermined smart badge visibility range **Nerlikar** teaches configuring a predetermined smart badge visibility range (see column 13, lines 55 - 65)."

As recited with respect to GROUP 2 Claims, **Nerlikar** at Col. 13, lines 55 – 64 states, "Another aspect of the present invention is that authorization codes, statuses and user-sets for access for certain locations may be dynamically changed. Specifically, when a person is working on a secure project for an extended period or specific period of time, wherein the person will have to travel from his or her home building A to buildings B and C or other remote authorized locations for an extended period of time or fixed period of time, the authorization for the person's entry into buildings B and C can be changed dynamically to allow access to both the buildings as well as any equipment therein."

This quote however is directed toward changing a user's "authorization for ... entry into buildings" and in no way teaches or suggests Claim 11's "configuring the predetermined physical boundary by *varying a sensitivity level of the* wireless *beacon*".

In **Nerlikar** users are excluded from a "building" if said user does not have the right "authorization codes, statuses and user-sets". The physical size of the "building" does not change at all. In contrast, Claim 11 recites "configuring the [shape of the] predetermined physical boundary by *varying a sensitivity level of the* wireless *beacon*, which does change the

area within the physical boundary. **Nerlikar** doesn't even mention beacons in this context. The Examiner is mistakenly attempting to equate Claim 11's changes in a beacon's signal strength with **Nerlikar's** physically exclusion from a building.

The Examiner then concludes that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of **Nerlikar** with the teaching of **Mooney** and **Rachabathuni** wherein visibility range determines security access for each user. The motivation being that access to classified information or areas are controlled." Again this Examiner based, speculative reasoning is not only a legally improper way to simplify the difficult determination of obviousness, as discussed above, with reference to the GROUP 1 and GROUP 2 claims, since the Examiner has provided no *showing* in the prior art of such a combination.

For the reasons discussed, Applicant asserts that the rejection of Claim 11 is in error and Applicant respectfully requests that said rejection be reversed as to Claim 11.

IX. CONCLUSION

Applicant asserts that none of the cited art either individually or in view of each other teach or suggest the Applicant's claimed invention. Furthermore, the Examiner has applied a legally impermissive approach to examining Claims 1 – 26, using Applicant's claims themselves as a guide to selecting references showing isolated features in the prior art for the purposes of rejecting those claims. The Examiner has provided no finding or showing as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Applicant's invention to combine the cited art in the manner claimed. As repeatedly stated in Graham and by the Federal Circuit, one cannot use a hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate a claimed invention.

In view of each individual reference in the art and an absence of any showing of a motivation to combine the teachings of the prior art, Applicant respectfully asserts that the Examiner did not make out a proper *prima facie* case of obviousness in rejecting Claims 1 - 26 under 35 U.S.C. § 103(a), and therefore respectfully requests reconsideration of the outstanding rejections and the allowance of all Claims on appeal.

Respectfully submitted,
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Date: 06-08-04 By: _____

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APPENDIX A (CLAIM APPENDIX)

1. A method for context-aware computer management comprising:

assigning database information a plurality of clearance levels;

assigning each smart badge within a set of smart badges one of the clearance levels;

using a wireless beacon to detect which smart badges are located within a predefined physical boundary;

identifying a lowest clearance level assigned to the smart badges within the boundary; and

providing access to that sub-set of the database information having a clearance level no higher than the lowest identified clearance level on a computer located with the predefined physical boundary.

2. The method of claim 1 further comprising:

defining those smart badges within the boundary as a set of visible smart badges; and

updating the set of visible smart badges in response to a change in smart badge visibility status.

3. The method of claim 2 further comprising:

recalculating the lowest clearance level in response to the change in smart badge visibility status.

4. The method of claim 2 further comprising:

recording the smart badge visibility status of each smart badge within an activity log.

5. The method of claim 1 wherein providing includes:

providing access to smart badge wearers assigned to the smart badges.

6. The method of claim 2 further comprising:

preventing access to the database when the smart badge visibility status is set to invisible for a predetermined timeout.

7. The method of claim 1 further comprising:

writing data items to the smart badges.

8. The method of claim 7 further comprising:

pre-reading the data item from the smart badge during idle periods.

9. The method of claim 1 further comprising

defining a badge removal confidence level indicating whether each smart badge has been continuously worn by corresponding assigned smart badge wearers.

10. The method of claim 1 further comprising:

assigning an expiration period to each of the smart badges; and

de-authenticating and erasing all data stored on a smart badge whose expiration

period has been exceeded.

11. The method of claim 1 wherein the using element includes:

configuring the predetermined physical boundary by varying a sensitivity level of the wireless beacon.

12. A method for context-aware computer management comprising:

assigning database information a plurality of clearance levels;

assigning each smart badge within a set of smart badges one of the clearance levels;

using a wireless beacon to detect which smart badges are located within a predefined physical boundary;

identifying a lowest clearance level assigned to the smart badges within the boundary;

providing access to that sub-set of the database information having a clearance level no higher than the lowest identified clearance level on a computer located with the predefined physical boundary;

defining those smart badges within the boundary as a set of visible smart badges;

updating the set of visible smart badges in response to a change in smart badge visibility status; and

recalculating the lowest clearance level in response to the change in smart badge visibility status.

13. A computer-usable medium embodying computer program code for context-aware computer management, comprising:

assigning database information a plurality of clearance levels;

assigning each smart badge within a set of smart badges one of the clearance levels;

using a wireless beacon to detect which smart badges are located within a predefined physical boundary;

identifying a lowest clearance level assigned to the smart badges within the boundary; and

providing access to that sub-set of the database information having a clearance level no higher than the lowest identified clearance level on a computer located with the predefined physical boundary.

14. The computer-usable medium of claim 13 further comprising:

defining those smart badges within the boundary as a set of visible smart badges; and

updating the set of visible smart badges in response to a change in smart badge visibility status.

15. The computer-usable medium of claim 14 further comprising:

recalculating the lowest clearance level in response to the change in smart badge visibility status.

16. The computer-usable medium of claim 13 wherein providing includes:

providing access to the database information to smart badge wearers assigned to the smart badges.

17. The computer-usable medium of claim 14 further comprising:

preventing access to the database when the smart badge visibility status is set to invisible for a predetermined timeout.

18. The computer-usable medium of claim 13 further comprising

defining a badge removal confidence level indicating whether each smart badge has been continuously worn by corresponding assigned smart badge wearers.

19. The computer-usable medium of claim 13 further comprising:

assigning an expiration period to each of the smart badges; and

de-authenticating and erasing all data stored on a smart badge whose expiration period has been exceeded.

20. A system for context-aware computer management comprising:

means for assigning database information a plurality of clearance levels;

means for assigning each smart badge within a set of smart badges one of the clearance levels;

means for using a wireless beacon to detect which smart badges are located within a predefined physical boundary;

means for identifying a lowest clearance level assigned to the smart badges within the boundary;

means for providing access to that sub-set of the database information having a clearance level no higher than the lowest identified clearance level on a computer located with the predefined physical boundary;

means for defining those smart badges within the boundary as a set of visible smart badges;

means for updating the set of visible smart badges in response to a change in smart badge visibility status; and

means for recalculating the lowest clearance level in response to the change in smart badge visibility status.

21. A system for context-aware computer management comprising:

a database, including information differentiated by a plurality of clearance levels;

a first wireless beacon;

a set of smart badges, detected by the first beacon to be within a predefined physical boundary, each badge assigned one of the clearance levels;

a computer located within the boundary;

a system service module, coupled to the beacon, for identifying a lowest clearance level assigned to the smart badges within the boundary; and

a software application, coupled to the service module and the database, for providing access to that sub-set of the information within the database having a clearance levels no higher than the lowest identified clearance level on the computer.

22. The system of claim 21, wherein the first beacon includes:

a wide angle RF beacon.

23. The system of claim 21, further comprising:

a second diffuse IR beacon, coupled to the service module, limited to detecting smart badges within a workroom.

24. The system of claim 21, wherein the smart badges include:

biometric sensors for detecting when a smart badge has been removed from an assigned smart badge wearer.

25. The system of claim 21, wherein the service module

defines those smart badges within the boundary as a set of visible smart badges, and

recalculates the lowest clearance level in response to a change in a visibility status.

26. The system of claim 21, wherein the application logs smart badge wearers assigned to visible smart badges onto a computer

APPENDIX B (MPEP – Secondary Authority)

MPEP §2143.01 Suggestion or Motivation To Modify the References.

MPEP §2144.03 Reliance on "Common Knowledge" in the Art or "Well Known" Prior Art (In limited circumstances, it is appropriate for an examiner to take official notice of facts not in the record or to rely on "common knowledge" in making a rejection, however such rejections should be judiciously applied. The standard of review applied to findings of fact is the "substantial evidence" standard under the Administrative Procedure Act (APA). See *In re Gartside*, 203 F.3d 1305, 1315, 53 USPQ2d 1769, 1775 (Fed. Cir. 2000). See also MPEP § 1216.01. In light of recent Federal Circuit decisions as discussed below and the substantial evidence standard of review now applied to USPTO Board decisions, the following guidance is provided in order to assist the examiners in determining when it is appropriate to take official notice of facts without supporting documentary evidence or to rely on common knowledge in the art in making a rejection, and if such official notice is taken, what evidence is necessary to support the examiner's conclusion of common knowledge in the art. Official notice without documentary evidence to support an examiner's conclusion is permissible only in some circumstances. While "official notice" may be relied on, *these circumstances should be rare* when an application is under final rejection or action under 37 CFR 1.113. *Official notice unsupported by documentary evidence* should *only* be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are *capable of instant and unquestionable demonstration as being well-known*. As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute" (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)). *It would <u>not</u> be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known.* For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. *In re Ahlert*, 424 F.2d at 1091, 165 USPQ at 420-21. See also *In re Grose*, 592 F.2d 1161, 1167-68, 201 USPQ 57, 63 (CCPA 1979) ("[W]hen the PTO seeks to rely upon a chemical theory, in establishing a prima facie case of obviousness, it must provide evidentiary support for the existence and meaning of that theory."); *In re Eynde,* 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973) ("[W]e reject the notion that judicial or administrative notice may be taken of the state of the art. The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amenable to the taking of such notice."). It is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697 ("[T]he Board cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in sup-port of these findings.").

While the court explained that, "as an administrative tribunal the Board clearly has expertise in the subject matter over which it exercises jurisdiction," it made clear that such "expertise may provide sufficient support for conclusions [only] as to peripheral issues." *Id.* at 1385-86, 59 USPQ2d at 1697. As the court held in *Zurko*, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.* at 1385, 59 USPQ2d at 1697. See also *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002) (In reversing the Board's decision, the court stated " 'common knowledge and common sense' on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation....The board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies."). [*Italic* added for emphasis]

MPEP §2145 Impermissible Hindsight:

MPEP §2145, part X, sub-part A (Applicants may argue that the examiner's conclusion of obviousness is based on improper hindsight reasoning. However, "[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).)

MPEP §2145, part X, sub-part C (As discussed in MPEP § 2143.01, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally avail-able to one of ordinary skill in the art, to modify or combine reference teachings. The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references, as discussed in the aforementioned section.)

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AF 2172

PATENT APPLICATION

ATTORNEY DOCKET NO. 10005248 -1

#10 WM

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Mehrban Jam

Confirmation No.: 6956

Application No.: 09/836952

Examiner: Ehichioya, Fred

Filing Date: Apr 17, 2001

Group Art Unit: 2172

Title: System And Method For Providing Context-Aware Computer Management Using Smart Identification Badges

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Sir:

Transmitted herewith in **triplicate** is the Appeal Brief in this application with respect to the Notice of Appeal filed on 03/03/2004. **Appeal Brief due on 05/08/2004 in accordance with 37 CFR 1.8 and MPEP 512.**
The fee for filing this Appeal Brief is (37 CFR 1.17(c)) $330.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

(X) (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) for the total number of months checked below:

(X)	one month	$110.00
( )	two months	$420.00
( )	three months	$950.00
( )	four months	$1480.00

06/14/2004 JADD01 00000140 082025 09836952
01 FC:1251 110.00 DA

( ) The extension fee has already been filled in this application.

( ) (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account **08-2025** the sum of **$440.00**. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

(X) I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit: **06/08/2004**

OR

( ) I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number _____ on _____

Number of pages:

Typed Name: **Ann Jesus**

Signature: _____

Respectfully submitted,

Mehrban Jam

By _____

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